

### ABSTRACT OF THE DISCLOSURE

A scanning antenna diversity system for mobile FM radio having an antenna system with controllable logic switch (2), wherein a different high-frequency reception signal (5), in terms of diversity, is passed to a receiver (3). An IF signal (9), derived from this reception signal turns on a diversity processor (4), which switches the logic switch (2) into a different switching position in response to reception interference. The diversity processor (4) has a first interference detector (6) whose momentary interference indicator signal (10) is obtained without delay from the momentary value of the IF signal (9), which is limited to the IF bandwidth, by means of determining the interference-related occurrence of impermissible momentary values of the frequency and amplitude of this signal. A second interference detector (7) is present, whose interference indicator signal (11) is obtained from the same IF signal (9), but from time-integral determination of the interference signal contents in frequency gaps kept free of the wanted signal according to the signal standardization of the FM multiplex signals of the FM demodulated IF reception signal (9a). The two interference indicator signals (10, 11) are passed to a logic circuit (8) to evaluate the signals and produce a logic control signal (12) to control the logic switch (2), so

that a different switching positions are selected at the earliest possible time after the occurrence of interference in the reception signal.